## Why did Asia crash?

## Disaster has spawned a new theory of financial crises

Less than two months ago, Bill Clinton dismissed Asia's currency turmoil as "a few little glitches in the road". Today, no one is so sanguine. The collapse in asset prices, the extent of financial and corporate insolvency and the slowdown in economic growth across the region are much worse than expected. Economists, like everybody else, are scrambling to understand why.

The most popular explanation is that these countries are facing currency crises.

Thailand was forced to abandon its peg to the dollar in July 1997 after a sustained speculative attack. Others faced the same fate after their currencies became relatively less competitive. Unfortunately, this reasoning does not explain why South Korea, an economy wholly different from others in East Asia, landed in such trouble. Nor does it explain why Asia's currencies were subject to attacks in the first place.

Conventional economic wisdom suggests two possible causes of a currency crisis. The first is government profligacy. If a country with a pegged exchange rate prints money to cover a budget deficit, investors will prefer to hold a less inflation-prone foreign currency, and foreign-exchange reserves will fall. At some point, speculators may assume that the country will no longer be able to defend its exchange rate

and will attack the currency. This explanation does not fit Asia, where budgets are more or less in balance.

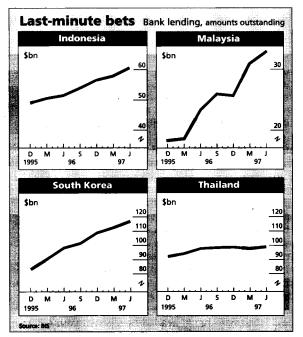
Currency crises might also occur because pegging the exchange rate requires governments to use monetary policy in order to maintain the currency's value. But as raising interest rates to protect the currency means slowing the economy, a government might at some point decide that the pain of maintaining the fixed exchange rate is not worthwhile. If the market doubts the government's commitment, then it will attack the currency. Again, this explanation does not fit Asia.

Diverse as they are, the East Asian countries have two characteristics in common. Throughout the region a boom-bust cycle in asset prices preceded the currency crisis. And in each case, banks and finance companies that lent on overly risky projects lie at the heart of the problem. In

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an intriguing new paper\* Paul Krugman of the Massachusetts Institute of Technology shows how these ingredients might suddenly precipitate a crash.

Mr Krugman, who pioneered formal economic analysis of what causes currency crises, points out that Asia's banks and finance companies operated with implicit government guarantees. These,



together with poor regulation, distorted investment decisions, encouraging bankers to finance risky projects in the expectation that they would enjoy the profits, if any, while the government would cover serious losses.

Competition among over-guaranteed and under-regulated banks leads bankers to base decisions not on a project's expected return but on its return in ideal circumstances, or what Mr Krugman calls its "Pangloss" value. Two implications follow: there will be too much investment, and the price of assets that are in limited supply, such as land, will rise excessively. He gives the following example. The rent on a plot of land has a 2/3 probability of being \$25 and a 1/3 probability of being

\$100. A risk-neutral investor would pay \$50 for the plot (2/3 times \$25 plus 1/3 times \$100). But the guaranteed bank would be willing to lend up to the "Pangloss" value of \$100. Eventually, asset prices would be twice their values in an undistorted market.

This bubble persists so long as the government guarantee is maintained. But then reality strikes. The first banks whose investments fail to yield Pangloss returns get bailed out, but the cost of the bail-outs reduces governments' willingness to provide future rescues. Without those im-

plicit government guarantees, Pangloss values collapse, leading to a general fall in asset prices, which in turn, leads to loan defaults and losses for the banks. This starts a spiral in which pessimism become self-fulfilling.

Mr Krugman's theory is illuminating, particularly in explaining why the crisis has been so severe despite the absence of big economic shocks. Like any model, this one simplifies reality. In the real world, bankers must put their own capital at risk, and governments do not cover all losses. Much investment is undertaken by private citizens and foreign banks who do not expect to be bailed out. Mr Krugman's model does not distinguish between domestic and foreign creditors-a significant omission, given that East Asia's problems grew because foreign banks kept lending even after signs of crisis

became apparent (see charts).

Nonetheless, the model suggests intriguing conclusions. First, Asia's real problem lies with banks and their regulation. Second, international capital mobility may not always maximise economic efficiency if banks are over-guaranteed and under-regulated. If foreign capital did not flow freely, Pangloss investment would push up domestic interest rates and slow the investment boom. Access to foreign capital weakens this restraint, allowing the bubble to get larger.

Third, Mr Krugman's analysis weakens the rationale for the IMF and foreign governments to bail out troubled economies. The support is meant to restore investors' confidence and limit economic collapse. But to the extent that these economies were living on a bubble, collapse is inevitable. Until it has run its course, restoring confidence may not be possible.

<sup>\* &</sup>quot;What happened to Asia?" Available on-line at http://web.mit.edu/krugman/www/DISINTER.html, which is Mr Krugman's website. January 1998.